



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/584,385  | 06/26/2006  | Katsuji Aoki         | 2006_0982A          | 8995             |
| 52349 7590 04/15/2009<br>WENDEROTH, LIND & PONACK L.L.P.<br>1030 15th Street, N.W.<br>Suite 400 East<br>Washington, DC 20005-1503 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| SMITH, LINDA B  |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 2862  |             |                      |                     |                  |
| MAIL DATE   |             | DELIVERY MODE        |                     |                  |
| 04/15/2009  |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/584,385

**Applicant(s)**

AOKI ET AL.

**Examiner**

LINDA B. SMITH

**Art Unit**

2862

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 6-15 is/are rejected.
- 7) ☒ Claim(s) 3-5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- Paper No(s)/Mail Date 10/21/08.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Amendment B, received on 12/16/08 has been entered into record. Claims 1, 3-4, 6-9, 12, 14 and 15 have been amended.
2. Claims 1-15 are now pending.

***Information Disclosure Statement***

3. The information disclosure statement (IDS) submitted on 10/21/08 was filed after the mailing date of the first Office action on 9/24/08. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Terminal Disclaimer***

4. The terminal disclaimer filed on 2/4/09 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on application no. 11/115,152 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Double Patenting***

5. Applicant's arguments, see terminal disclaimer and page 11 of remarks, filed 12/16/08 and 2/4/09, with respect to claims 1-15 have been fully considered and are persuasive. The rejection of 9/24/08 has been withdrawn.

***Response to Amendment***

6. Applicant's amendment, see pages 10-11 of remarks, filed 12/16/08, with respect to claims 14 and 15 have been fully considered and are persuasive. The rejection of 9/24/08 has been withdrawn.
7. Applicant's amendment, see page 10 of remarks, filed 12/16/08, with respect to the abstract have been fully considered and are persuasive. The objection of 9/24/08 has been withdrawn.

***Response to Arguments***

8. Applicant's arguments with respect to claims 1, 2 and 9-15 have been considered but are moot in view of the new ground(s) of rejection.

***Allowable Subject Matter***

9. Claims 3-5 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. The indicated allowability of claim 7 is withdrawn in view of the revised interpretation of prior reference(s) to Sakai. Rejections based on the previously cited reference(s) follow.

The Examiner reviewed the prior art of Sakai and found that a "unit" though very broad in the basic terminology could be the adjusting unit along with the controller since a combination of both or alone could be configured to perform the function of changing the imaging cycle (i.e. period or time) in which the hypothetical imaging zone is repeatedly imaged. It would have been obvious to one of ordinary skill in the art at the time of the invention, would have the routine

skills to program the controller of Sakai along with the control part (22) with the ability to change the imaging cycle remotely via communication lines.

*Claim Rejections - 35 USC § 103*

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 1, 2 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai et al. (US PG Pub. No. 2005/0078184 and hereinafter Sakai) in view of Kato et al. (US Patent No. 6,597,393 and hereinafter Kato).

14. As to claim 1, Sakai discloses a camera terminal constituting an imaging zone adjusting apparatus that adjusts an imaging zone using multiple camera terminals, comprising:

an adjusting unit (22) configured to adjust the position of the hypothetical imaging zone by controlling said camera (0044); and

a communication unit configured to send and receive hypothetical imaging zone information indicating the hypothetical imaging zone **(0042)**,

wherein said adjusting unit is configured to adjust the position of the hypothetical imaging zone to which the camera terminal belongs based on the hypothetical imaging zone to which the camera terminal belongs provided with said adjusting unit and the hypothetical imaging zones of the other camera terminals indicated by the hypothetical imaging zone information received by said communication unit so that a combined zone (i.e. **sum of imaging zone**) of the hypothetical imaging zones of said multiple camera terminals completely covers a specific imaging target zone (**Figs. 5 & 6, 0053-0057, 0071 and 0079**).

Sakai does not disclose:

a camera configured to image a hypothetical imaging zone that is a hypothetical imaging zone including a sum of imaging zones obtained by changing a rotation angle of said camera or a position of said camera within a specific zone in a specific period of time.

Kato discloses a camera control system having:

a camera configured to image a hypothetical imaging zone that is a hypothetical imaging zone including a sum of imaging zones obtained by changing a rotation angle of said camera or a position of said camera within a specific zone in a specific period of time (**col. 3, lines 53-67, col. 5, lines 53-65, col. 6, lines 53-64 and col. 7, lines 43-51**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the camera control system of Sakai with a camera control that can permit remote operations over a plurality of camera to switch camera views (**see combined zone of the hypothetical imaging zones of Sakai**) over a predetermined period of time as taught by Kato to

provide a means to automatically switch the imaging regions between the cameras at suitable intervals of a predetermined period of time using a timer in each camera used as well as to control the image pickup direction of the camera.

15. As to claim 2, Sakai discloses wherein said camera repeatedly images said hypothetical imaging zone **(0060)**.

16. As to claim 6, Sakai discloses wherein said camera comprises a unit **(20,22)** configured to change the imaging cycle in which said hypothetical imaging zone is repeatedly imaged **(044)**, and said adjusting unit **(22)** is further configured to adjust the position and imaging cycle of the hypothetical imaging zone to which the camera terminal belongs so that the imaging cycle of the hypothetical imaging zone to which the camera terminal belongs and the imaging cycles of a hypothetical imaging zone adjacent to said hypothetical imaging zone are nearly equal **(0044, 0053-0056)**.

17. As to claim 7, Sakai disclose wherein said camera comprises a unit **(20,22)** configured to change the imaging cycle in which said hypothetical imaging zone is repeatedly imaged **(0044)**, and said adjusting unit **(22)** is further configured to adjust the position and imaging cycle of the hypothetical imaging zone to which the camera terminal belongs so that the imaging cycle of the hypothetical imaging zone to which the camera terminal belongs becomes smaller **(0044)**.

18. As to claim 8, Sakai discloses wherein said imaging zone adjusting apparatus further includes: a merging unit **(20,22)** configured to obtain images captured by the cameras of said multiple camera terminals and merge them into a spatially continued image **(0044)**; and a display unit configured to display the merged image **(0041)**.

19. As to claim 9, Sakai discloses the camera terminal wherein said adjusting unit is further configured to adjust the position and aspect ratio (i.e. image resolution) of the hypothetical imaging zone to which the camera terminal belongs so that the aspect ratio of the hypothetical imaging zone to which the camera terminal belongs becomes a specific target quantity (**0065-0066**).

20. As to claim 10, Sakai discloses wherein said aspect ratio target quantity is an aspect ratio determined by the position of the imaging zone and the installation points of the camera (**0066 and Figs. 4, 6-8**)

21. As to claim 11, Sakai discloses an imaging zone adjusting apparatus that adjusts an imaging zone using multiple camera terminals, said apparatus comprising multiple camera terminals (**abstract, 0049 and Fig. 1**).

22. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai in view of Kato.

23. As to claim 12, as best understood Sakai discloses a sensor terminal constituting a detection zone adjusting apparatus that adjusts a detection zone using multiple sensor terminals, said the sensor terminal comprising:

an adjusting unit (**22**) operable to adjust the position of said hypothetical detection zone by controlling said sensor (**0042 and 0044**); and

a communication unit configured to send/receive hypothetical detection zone information indicating said hypothetical detection zone (**0042**),

wherein said adjusting unit is configured to adjust the position of the hypothetical detection zone to which the sensor terminal belongs based on the hypothetical detection zone to



which the sensor terminal belongs provided with said adjusting unit and the hypothetical detection zones of the other sensor terminals indicated by the hypothetical detection zone information received by said communication unit so that a combined zone (**i.e. sum of imaging zones**) of the hypothetical detection zones of said multiple sensor terminals completely covers a specific detection target zone (**0053-0057, 0079 and Figs. 5 & 6**).

Sakai does not disclose:

a sensor that detects physical quantities within a hypothetical detection zone that is a hypothetical detection zone including a sum of imaging zones obtained by changing a rotation angle of said camera or a position of said camera within a specific zone in a specific period of time.

Kato discloses a camera control system:

a sensor that detects physical quantities within a hypothetical detection zone that is a hypothetical detection zone including a sum of imaging zones obtained by changing a rotation angle of said camera or a position of said camera within a specific zone in a specific period of time (**col. 3, lines 53-67, col. 5, lines 53-65, col. 6, lines 53-64 and col. 7, lines 43-51**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the camera control system of Sakai with a camera control that can permit remote operations over a plurality of sensor terminal to switch the sensor terminal views (**i.e. sum of the imaging zones/combined zone of Sakai**) over a predetermined period of time as taught by Kato to provide a means to automatically switch the imaging regions between the sensor terminal at suitable intervals of a predetermined period of time using a timer as well as to control the image pickup direction of the sensor without interrupting the image capture flow.

24. As to claim 13, as best understood Sakai discloses wherein said sensor repeatedly detects physical quantities within said hypothetical detection zone (**0060**).

25. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai in view of Kato.

26. As to claim 14, as best understood Sakai discloses an imaging zone adjusting method in a camera terminal constituting an imaging zone adjusting apparatus that adjusts an imaging zone using multiple camera terminals (**abstract, Figs. 5 & 6, 0049, 0052-0054**), and

a communication unit configured to send and receive hypothetical imaging zone information indicating the hypothetical imaging zone (**0042-0044, 0060, and 0064**), the imaging zone adjusting method, comprising:

adjusting the position of the hypothetical imaging zone to which the camera terminal belongs based on the hypothetical imaging zone to which the camera terminal belongs and the hypothetical imaging zones of the other camera terminals indicated by the hypothetical imaging zone information received by the communication unit so that a combined zone (**i.e. sum of imaging zone**) of the hypothetical imaging zones of the multiple camera terminals completely covers a specific imaging target zone (**0053-0057, 0077, 0079**).

**Sakai** does not disclose:

the camera terminal including a camera that images a hypothetical imaging zone that is a hypothetical imaging zone including a sum of imaging zones obtained by changing a rotation angle of said camera or a position of said camera within a specific zone in a specific period of time.

**Kato** discloses a camera control system:

the camera terminal including a camera that images a hypothetical imaging zone that is a hypothetical imaging zone including a sum of imaging zones obtained by changing a rotation angle of said camera or a position of said camera within a specific zone in a specific period of time (col. 3, lines 53-67, col. 5, lines 53-65, col. 6, lines 53-64 and col. 7, lines 43-51).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the camera adjusting method of Sakai with a camera adjusting method that can permit remote operations over a plurality of camera terminals to switch the camera terminal views (i.e. **sum of the imaging zones/combined zone of Sakai**) over a predetermined period of time as taught by Kato to provide a means to automatically switch the imaging regions between the camera terminal at suitable intervals of a predetermined period of time using a timer as well as to control the image pickup direction of the camera terminal without interrupting the image capture flow.

27. As to claim 15, as best understood Sakai discloses a program stored on a computer-readable medium for a camera terminal constituting an imaging zone adjusting apparatus that adjusts an imaging zone using multiple camera terminals, said program causing a computer to execute the step included in the imaging zone adjusting method (0041-0044, 0111, 0134).

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINDA B. SMITH whose telephone number is (571)270-3827. The examiner can normally be reached on Monday through Friday 9:00AM-6:30PM EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on (571) 272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Linda B Smith/  
Examiner, Art Unit 2862

/William B. Perkey/  
for Patrick Assouad, SPE of Art Unit  
2862